Application No. 10/587,161 Amendment dated December 15, 2009

Amendment dated December 15, 2009 Reply to Office Action of September 15, 2009

AMENDMENTS TO THE CLAIMS

Docket No : 12810-00317-US

Listing of Claims:

1. (Currently amended) A stabilized solid or liquid enzyme formulation comprising at least

one enzyme and at least one stabilizing agent selected from the group consisting of gummi

arabieum, which comprises at least one isolated plant protein and mixtures thereof, wherein the

enzyme is phytase.

2-3. (Cancelled).

4. (Previously presented) The enzyme formulation according to claim 1, wherein the

phytase is selected from the group consisting of a plant phytase, a fungal phytase, a bacterial

phytase, a phytase producible by a yeast and a consensus phytase.

5. (Previously presented) The enzyme formulation according to claim 1, wherein the plant

protein is selected from the group consisting of grain proteins, pulses proteins, vegetable

proteins, fruit proteins, hydrolysates thereof and mixtures thereof.

6. (Previously presented) The enzyme formulation according to claim 1, wherein the

formulation is liquid.

7. (Previously presented) The enzyme formulation according to claim 1, wherein the

formulation is solid.

8. (Previously presented) The enzyme formulation according to claim 7, wherein the solid

formulation is in the form of granule(s).

 (Currently amended) The enzyme formulation according to claim 8, wherein the granule(s) comprises at least one phytase, a solid carrier which comprises at least 15% (w/w) of

an edible carbohydrate polymer, and at least one stabilizing agent, wherein the stabilizing agent

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is selected from the group consisting of gummi arabicum, which comprises at least one isolated plant protein and mixtures thereof.

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- 10. (Previously presented) The enzyme formulation according to claim 9, wherein the granule(s) is coated.
- 11. (Currently amended) A process for the preparation of phytase-containing granule(s). wherein the process comprises processing
  - at least one phytase. (i)
- (ii) a solid carrier which comprises at least 15% (w/w) of an edible carbohydrate polymer, and
- (iii) at least one stabilizing agent, wherein the stabilizing agent is selected from the group consisting of gummi arabicum, which comprises at least one isolated plant protein-and mixtures thereof.
- 12. (Previously presented) The process according to claim 11, wherein water is added to the processing.
- (Previously presented) The process according to claim 12, wherein the water and the phytase are provided as phytase-containing aqueous liquid(s).
- 14. (Previously presented) The process according to claim 13, wherein the liquid is a filtrate derived from a fermentation process resulting in production of the phytase.
- 15. (Previously presented) The process according to claim 11, wherein the granules are dried subsequent to the processing.
- 16. (Previously presented) The process according to claim 11, wherein the plant protein is selected from the group consisting of grain proteins, pulses proteins, vegetable proteins, fruit proteins, hydrolysates thereof and mixtures thereof.

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17. (Previously presented) The process according to claim 11, wherein the process comprises:

- a) mixing an aqueous liquid containing the phytase with the solid carrier and the stabilizing agent;
- mechanically processing the mixture obtained in a) to obtain phytase-containing granules; and
- c) drying the phytase-containing granules obtained in b).
- 18. (Previously presented) The process according to claim 11, wherein the processing is mechanical which comprises extrusion, pelleting, high-shear granulation, expansion, fluid bed agglomeration, spheronisation, drum granulation or a combination thereof.
- 19. (Previously presented) The process according to claim 11, wherein the phytase-containing aqueous liquid, the solid carrier and the stabilizing agent are mixed and the resulting mixture is kneaded before granulation.
- (Previously presented) The process according to claim 11, wherein the processing is extrusion performed at low pressure.
- (Previously presented) The process according to claim 11, wherein the granule(s) is spheronised.
- 22. (Previously presented) The process according to claim 11, wherein the granule(s) is coated.
- 23-24. (Cancelled).
- (Previously presented) The process according to claim 11, wherein the granule(s) has phytase activity ranging from 1,000 to 80,000 FTU/g.

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(Previously presented) Enzyme-containing granule(s) obtained by the process as defined

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in claim 11.

27-33. (Cancelled).

34. (Previously presented) The process according to claim 11, wherein the processing is

extrusion performed in a basket- or dome-extruder.

35. (Currently amended) A process for the preparation of an animal feed, or a premix or

precursor to an animal feed, the process comprising mixing at least one enzyme formulation

selected from the group consisting of a solid, liquid, and a solid and liquid formulation

comprising

(a) at least one enzyme and at least one stabilizing agent selected from the group

consisting of gummi arabicum, comprising at least one isolated plant protein and

mixtures thereof, wherein the enzyme is phytase, or

(b) the enzyme-containing granule(s) as claimed in claim 26,

with one or more animal feed substance(s) or ingredient(s).

36. (Currently amended) A process for the preparation of a composition, or a premix or a

precursor suit-able for human nutrition, the process comprising mixing at least one enzyme

formulation selected from the group consisting of a solid, liquid, and a solid and liquid

formulation comprising

 (a) at least one enzyme and at least one stabilizing agent selected from the group eonsisting of gummi-arabicum; comprising at least one isolated plant protein and

mixtures thereof, wherein the enzyme is phytase, or

mixtures mereor, wherein the chzyme is phytase, o

(b) the enzyme-containing granule(s) as claimed in claim 26,

with one or more food substance(s) or ingredient(s).

37. (Previously presented) The process according to claim 35, wherein the mixture of feed or

food substance(s) and the enzyme formulation is sterilized or treated with steam, pelletized and

optionally dried.

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38. (Previously presented) The process according to claim 36, wherein the mixture of feed or food substance(s) and the enzyme formulation is sterilized or treated with steam, pelletized and optionally dried.

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- 39. (Currently amended) A process for promoting the growth of an animal, the process comprising feeding an animal with a diet that comprises at least one enzyme formulation selected from the group consisting of a solid, liquid, and a solid and liquid formulation comprising
  - (a) at least one enzyme and at least one stabilizing agent selected from the group consisting of gummi-arabicum, comprising at least one isolated plant protein and mixtures thereof, wherein the enzyme is phytase, or
  - (b) the enzyme-containing granule(s) as claimed in claim 26.
- 40. (Currently amended) A process for improving the feed conversion rate, the process comprising feeding an animal with a diet that comprises at least one enzyme formulation selected from the group consisting of a solid, liquid, and a solid and liquid formulation comprising
  - (a) at least one enzyme and at least one stabilizing agent selected from the group consisting of gummi arabicum, comprising at least one isolated plant protein and mixtures thereof, wherein the enzyme is phytase, or
  - (b) the enzyme-containing granule(s) as claimed in claim 26.
- 41. (Currently amended) Human food comprising at least one enzyme formulation selected from the group consisting of a solid, liquid, and a solid and liquid formulation comprising
  - (a) at least one enzyme and at least one stabilizing agent selected from the group consisting of gummi arabicum, comprising at least one isolated plant protein and mixtures thereof, wherein the enzyme is phytase, or
  - (b) the enzyme-containing granule(s) as claimed in claim 26.
- (Currently amended) Animal feed comprising at least one enzyme formulation selected 42. from the group consisting of a solid, liquid, and a solid and liquid formulation comprising

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(a) at least one enzyme and at least one stabilizing agent selected from the group eonsisting of gummi arabieum, comprising at least one isolated plant protein and mixtures thereof, wherein the enzyme is phytase, or

(b) the enzyme-containing granule(s) as claimed in claim 26.